# Complete Summary

## GUIDELINE TITLE

Donor cancer.

## BIBLIOGRAPHIC SOURCE(S)

Donor cancer. Nephrology 2005 Oct;10(S4):S125-8.

Donor cancer. Westmead NSW (Australia): CARI - Caring for Australians with Renal Impairment; 2005 Jun. 8 p. [12 references]

## GUIDELINE STATUS

This is the current release of the guideline.

## COMPLETE SUMMARY CONTENT



## SCOPE

### DISEASE/CONDITION(S)

- Cancer
- Renal transplantation

### GUIDELINE CATEGORY

Evaluation
Management
Risk Assessment
Treatment

### CLINICAL SPECIALTY

Critical Care
Emergency Medicine
Nephrology
Nursing
Pediatrics
Surgery
Urology

## INTENDED USERS

Advanced Practice Nurses
Nurses
Physician Assistants
Physicians

## GUIDELINE OBJECTIVE(S)

- To provide a practical and applicable protocol, based on the evidence that is available, for the selection of deceased kidney donors
- To provide a practical and applicable protocol, based on the evidence available for the assessment of living donors, prior to kidney donation

## TARGET POPULATION

Patients awaiting renal transplantation

## INTERVENTIONS AND PRACTICES CONSIDERED

### Evaluation/Risk Assessment

Assessment for exclusion of cancer in potential kidney donors by clinical history and clinical examination

- Donor age <50 years
- Donor age $\geq$50 years

### Management/Treatment

Donor exclusion for history or presence of cancer with exceptions

- Non-metastatic, non-melanoma skin cancer
- Carcinoma in situ of the cervix
- Other cancers know to have been fully eradicated

## MAJOR OUTCOMES CONSIDERED

- Donor cancer detection rate
- Donor exclusion rate
- Transmission rate of cancer from donor to recipient

## METHODOLOGY

### METHODS USED TO COLLECT/SELECT EVIDENCE

Searches of Electronic Databases

### DESCRIPTION OF METHODS USED TO COLLECT/SELECT THE EVIDENCE

**Databases searched**: Medical Subject Heading (MeSH) terms and text words for kidney transplantation and cadaveric organs were combined with MeSH terms and text words for diabetes, hypertension, viruses, bacterial infections, non-heart beating, marginal donor, paediatric donor, aged donor, and donor with prior cancer. These were then combined with the Cochrane highly sensitive search strategy for randomized controlled trials and search filters for identifying prognosis and aetiology studies. The search was carried out in Medline (1966 – November Week 2 2003). The Cochrane Renal Group Trials Register was also searched for trials not indexed in Medline. A further search was carried out in Medline (January 2004) using the text words donor malignancy, renal transplantation and liver transplantation.

**Date of searches**: 12 December 2003; January 2004.

### NUMBER OF SOURCE DOCUMENTS

Not stated

### METHODS USED TO ASSESS THE QUALITY AND STRENGTH OF THE EVIDENCE

Weighting According to a Rating Scheme (Scheme Given)

### RATING SCHEME FOR THE STRENGTH OF THE EVIDENCE

**Levels of Evidence**

**Level I**: Evidence obtained from a systematic review of all relevant randomized controlled trials (RCTs)

**Level II**: Evidence obtained from at least one properly designed RCT

**Level III**: Evidence obtained from well-designed pseudo-randomized controlled trials (alternate allocation or some other method); comparative studies with concurrent controls and allocation not randomized, cohort studies, case-control studies, interrupted time series with a control group; comparative studies with historical control, two or more single arm studies, interrupted time series without a parallel control group

**Level IV**: Evidence obtained from case series, either post-test or pretest/post-test

## METHODS USED TO ANALYZE THE EVIDENCE

Review of Published Meta-Analyses
Systematic Review with Evidence Tables

## DESCRIPTION OF THE METHODS USED TO ANALYZE THE EVIDENCE

Not stated

## METHODS USED TO FORMULATE THE RECOMMENDATIONS

Expert Consensus

## DESCRIPTION OF METHODS USED TO FORMULATE THE RECOMMENDATIONS

Not stated

## RATING SCHEME FOR THE STRENGTH OF THE RECOMMENDATIONS

Not applicable

## COST ANALYSIS

A formal cost analysis was not performed and published cost analyses were not reviewed.

## METHOD OF GUIDELINE VALIDATION

Comparison with Guidelines from Other Groups
Peer Review

## DESCRIPTION OF METHOD OF GUIDELINE VALIDATION

Recommendations of Others. Recommendations regarding use of potential kidney donors with cancer for renal transplantation from the following groups were discussed: Kidney Disease Outcomes Quality Initiative, British Renal Association, European Best Practice Guidelines, The United Network for Organ Sharing, and The British Transplantation Society.

# RECOMMENDATIONS

## MAJOR RECOMMENDATIONS

Definitions for the levels of evidence (I–IV) can be found at the end of the "Major Recommendations" field.

**Guidelines**

No recommendations possible based on Level I or II evidence

**Suggestions for Clinical Care**

(Suggestions are based on Level III and IV sources)

- Cancer is transmissible through organ donation and the risk of transmission, although in the order of 0.015%, cannot be fully eliminated.
- Deceased and living donors under the age of 50 years should have prior and current cancer excluded by clinical history and clinical examination. Female donors of reproductive age with death due to intra-cerebral haemorrhage should be screened for metastatic choriocarcinoma by testing serum human chorionic gonadotropin β-subunit (β-HCG) concentration. Skin, breast and large colon cancer are the commonest cancers in the general population under 50 years of age and should be specifically considered.
- Deceased and living donors over the age of 50 years should have prior and current cancer excluded by clinical history and clinical examination. Investigations should include Prostate Specific Antigen testing in males. Cancer of the prostate in males, breast in females, large bowel, lung, melanoma, stomach, pancreas, kidney and bladder, lymphoma and leukaemias are the commonest cancers in the general population aged over 50 years, and should be specifically considered.
- A donor will be excluded if they are confirmed or suspected to have, or have had a diagnosis of cancer which may be transmitted to the recipient. Donors and organs should be examined thoroughly at the time of retrieval and frozen sections taken of any suspect lesions. A formal post-mortem is desirable in all cases.
- Exceptions to the above may be made in the case of:
    - Non-metastatic, non-melanoma skin cancer
    - Carcinoma in situ of the cervix
    - Other cancers known to have been fully eradicated from the donor
- Donors with primary intracerebral tumours may be acceptable in the absence of neurosurgical intervention. Specific consent should be sought from the recipient of organs from such donors.

**Definitions**:

**Levels of Evidence**

**Level I**: Evidence obtained from a systematic review of all relevant randomized controlled trials (RCTs)

**Level II**: Evidence obtained from at least one properly designed RCT

**Level III**: Evidence obtained from well-designed pseudo-randomized controlled trials (alternate allocation or some other method); comparative studies with concurrent controls and allocation not randomized, cohort studies, case-control studies, interrupted time series with a control group; comparative studies with historical control, two or more single arm studies, interrupted time series without a parallel control group

**Level IV**: Evidence obtained from case series, either post-test or pretest/post-test

### CLINICAL ALGORITHM(S)

None provided

## EVIDENCE SUPPORTING THE RECOMMENDATIONS

### TYPE OF EVIDENCE SUPPORTING THE RECOMMENDATIONS

The type of supporting evidence is identified and graded for each recommendation (see "Major Recommendations").

## BENEFITS/HARMS OF IMPLEMENTING THE GUIDELINE RECOMMENDATIONS

### POTENTIAL BENEFITS

- Appropriate assessment and exclusion of potential kidney donors with cancer for renal transplantation
- Prevention of transmission of cancer from kidney donors to renal transplant recipients

### POTENTIAL HARMS

Not stated

## CONTRAINDICATIONS

### CONTRAINDICATIONS

Tumours with a propensity to late recurrence such as breast cancer, malignant melanoma and sarcomas are an absolute contraindication to organ donation.

## IMPLEMENTATION OF THE GUIDELINE

### DESCRIPTION OF IMPLEMENTATION STRATEGY

#### Implementation and Audit

The Australia and New Zealand Dialysis and Transplant Registry (ANZDATA) and Australia and New Zealand Organ Donation Registry (ANZOD) need to produce maintain an Annual Report of the outcome of all organ donations from donors with a prior history of cancer.

## INSTITUTE OF MEDICINE (IOM) NATIONAL HEALTHCARE QUALITY REPORT CATEGORIES

### IOM CARE NEED

Living with Illness

### IOM DOMAIN

Effectiveness

## IDENTIFYING INFORMATION AND AVAILABILITY

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Donor cancer. Nephrology 2005 Oct;10(S4):S125-8.

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### ADAPTATION

Not applicable: The guideline was not adapted from another source.

### DATE RELEASED

2005 Oct

### GUIDELINE DEVELOPER(S)

Caring for Australasians with Renal Impairment - Disease Specific Society

### SOURCE(S) OF FUNDING

Industry-sponsored funding administered through Kidney Health Australia

### GUIDELINE COMMITTEE

Not stated

### COMPOSITION OF GROUP THAT AUTHORED THE GUIDELINE

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### FINANCIAL DISCLOSURES/CONFLICTS OF INTEREST

All guideline writers are required to fill out a declaration of conflict of interest.

## GUIDELINE STATUS

This is the current release of the guideline.

## GUIDELINE AVAILABILITY

Electronic copies: Available in Portable Document Format (PDF) from the Caring for Australasians with Renal Impairment (CARI) Web site.

Print copies: Available from Caring for Australasians with Renal Impairment, Locked Bag 4001, Centre for Kidney Research, Westmead NSW, Australia 2145

## AVAILABILITY OF COMPANION DOCUMENTS

The following is available:

- The CARI guidelines. A guide for writers. Caring for Australasians with Renal Impairment. 2006 May. 6 p.

Electronic copies: Available from the Caring for Australasians with Renal Impairment (CARI) Web site.

## PATIENT RESOURCES

None available

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Date Modified: 6/15/2009